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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,677	02/25/2004	Stewart S. Taylor	884.B91US1	3000
21186	7590	11/30/2005	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH 1600 TCF TOWER 121 SOUTH EIGHT STREET MINNEAPOLIS, MN 55402			MAI, LAM T	
			ART UNIT	PAPER NUMBER
			2819	

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	Application No. 10/786,677	Applicant(s) TAYLOR ET AL.	
	Examiner LAM T. MAI	Art Unit 2819	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26-28 is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-12, 16-22 and 25 is/are rejected.
- 7) ☒ Claim(s) 5-6, 13-15, 23-24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 7-12, 16-22, and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Miyatani (USP 6,677,820).

Regarding claim 1, Miyatani discloses a circuit for compensation distortion that teaches an amplifier producing output and receiving input signal with an adjustable phase (3) to be adjusted according indication of amplitude detected by the level detector (5) (see figures 1 and 10)

Regarding claim 2, Miyatani teaches detector (5) to detect the amplitude.

Regarding claim 3, Miyatani teaches adjustable phase (3) which is controlled by a varactor.

Regarding claim 4, Miyatani teaches d/a converter (7,8) that is functioning same as translation circuit which transform the amplitude into a control signal to adjust the adjustable phase.

Regarding claim 11, Miyatani discloses a circuit for compensation distortion that teaches an amplifier producing output and receiving input signal with an adjustable phase (3) to be adjusted according to indication amplitude detected by the level detector (5) and the antenna (6) coupled to amplifier (see figures 1 and 10).

Regarding claim 12, Miyatani teaches d/a converter (7,8) that is functioning same as translation circuit which transform the amplitude into a control signal to adjust the adjustable phase.

Regarding claim 16, Miyatani discloses technique detecting an indication of an amplitude of an output signal of an amplifier; and adjusting a phase of an input signal of the amplifier responsive to the indication to reduce a change in a phase of the output signal (see figures 1 and 10).

Regarding claim 17, Miyatani teaches detecting an envelope (col. 13, lines 56-57) of the output signal.

Regarding claim 18, Miyatani teaches level detector (5) detect peak value of the output signal.

Regarding claim 19 Miyatani teaches output signal power value is included in the amplitude of the output signal.

Regarding claim 20, Miyatani teaches adjustable phase reduce the change in the phase of the output.

Regarding claim 21, Miyatani teaches adjustable phase reduce a change in the amplitude of the output signal.

Regarding claim 22, Miyatani discloses technique performing detecting an indication of an amplitude of an output signal of an amplifier; and adjusting a phase of an input signal of the amplifier responsive to the indication to reduce a change in a phase of the output signal (see figures 1 and 10).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyatani as applied to claim 1 above. Miyatani fails to teach CMOS technique used in the amplifier. However, CMOS technique is well known to one of ordinary skill in the art. Therefore, it would have been obvious to includes CMOS in the amplifier for power saving and cost saving.

Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyatani as applied to claims 1-4 above, and further in view of Tichauer (USP 6,597,244).

Regarding claims 8-10, Miyatani disclose discloses an amplify circuit for compensation distortion that teaches an amplifier producing output and receiving input signal with an adjustable phase (3) to be adjusted according indication of amplitude

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detected by the level detector (5) of an output signal to reduce phase distortion (see figures 1 and 10).

Miyatani fails to teaches or suggest multiple stage amplifier circuit.

While, Tichauer teaches multi stage amplifier circuit technique to improve output of the circuit.

I would have been obvious to one of ordinary skill in the art of the invention to incorporate Miyatani's amplifier into Tichauer's circuit to improve distortion compensation.

Regarding claim 25, Miyatani disclose discloses an amplify circuit for compensation distortion that teaches an amplifier producing output and receiving input signal with an adjustable phase (3) to be adjusted according indication of amplitude detected by the level detector (5) of an output signal to reduce phase distortion (see figures 1 and 10).

Miyatani fails to teaches or suggest second stage amplifier circuit.

While, Tichauer teaches multi stage amplifier circuit technique in amplifier circuit to improve output of the amplifier.

I would have been obvious to one of ordinary skill in the art of the invention to incorporate Miyatani's amplifier into Tichauer's circuit to improve distortion compensation.

***Allowable Subject Matter***

Claims 26-28 are allowable. The prior art fails to teaches or suggest a “a translinear circuit to be coupled to the second input signal and to the indication, and to adjustable phase”.

Claims 5-6, 13-15 and 23-24 are objected to as being dependent upon a rejected base claim, but they would be considered for allowable if they are rewritten in independent form including all of the limitations of the base claim and any intervening claims. The features of objected claims are not taught or suggested in the prior art.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAM T. MAI whose telephone number is (571)272-1807. The examiner can normally be reached on 5:30 am - 4:00pm.

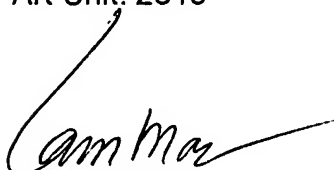
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Barnie Rexford can be reached on (571) 272-7492. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read "Lam T. Mai". The signature is fluid and cursive, with a long, sweeping underline that extends to the right.

Lam T. Mai

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